InfoBrief

Nondisclosure Agreements, Trade Secrets, and Trademarks Considered Very Important to More U.S. Businesses than Were Patents or Copyrights in 2017

NSF 22-305 | October 2021

Brandon Shackelford and Audrey Kindlon

The assets that companies use to generate revenue and profit can be tangible, such as buildings and equipment, or intangible intellectual property (IP), such as patents, brand names, software, and secret recipes. Because IP can sometimes be easily copied, companies would have little incentive to invest in it if they did not have ways to protect their IP from competitors. To inform discussions on this topic, the Annual Business Survey (ABS) asked a sample of for-profit U.S. businesses to report the importance of six types of IP protection to their business in 2017: copyrights, design patents, nondisclosure agreements, trademarks, trade secrets, and utility patents.

According to estimates from the ABS, 7.3% of for-profit U.S. businesses viewed trade secrets as very important to their business in 2017, and another 9.0% viewed them as somewhat important (table 1).1 Trade secrets are one way that businesses can protect their IP and are defined under U.S. law as all forms and types of financial, business, scientific, technical, economic, or engineering information that (1) the owner has taken reasonable measures to keep secret and (2) derive independent economic value, actual or potential, from not being generally known to the public (18 U.S.C. § 1839). Trademarks were reported as important by a similar share of businesses as had emphasized trade secrets (7.0% very important and 8.9% somewhat important). A trademark includes any word, name, symbol, or device or any combination thereof that identifies and distinguishes the source of goods or services of one manufacturer or seller from those of another.²

Nondisclosure agreements—legally binding contracts between parties that require them to keep certain information such as trade secrets confidential—were reported by the largest share of businesses (19.5%) as a type of IP protection that is viewed as very important (8.6%) or somewhat important (10.9%) to their business. The remaining types of IP protection covered by ABS (utility patents, design patents, trademarks, and copyrights) were each viewed as very or somewhat important by a smaller percentage of businesses.

This InfoBrief presents an overview of the degree of importance of each of these types of IP protection to U.S. businesses, including observations on variations by industry, size of company, and companies' self-reported innovation activity.

Table 1
Importance of intellectual property protection, by type of protection: 2017

(Percent)

Type of intellectual property protection	Very important	Somewhat important	Not at all important
Nondisclosure agreements	8.6	10.9	80.5
Trade secrets	7.3	9.0	83.7
Trademarks	7.0	8.9	84.1
Copyrights	6.2	8.0	85.8
Design patents	2.8	4.9	92.3
Utility patents	2.5	4.2	93.3

Note(s):

Detail may not add to total because of rounding. Statistics are representative of companies located in the United States with at least one employee. There were estimated to be 4,603,606 such companies in 2017.

Source(s):

National Center for Science and Engineering Statistics and Census Bureau, Annual Business Survey, 2017.

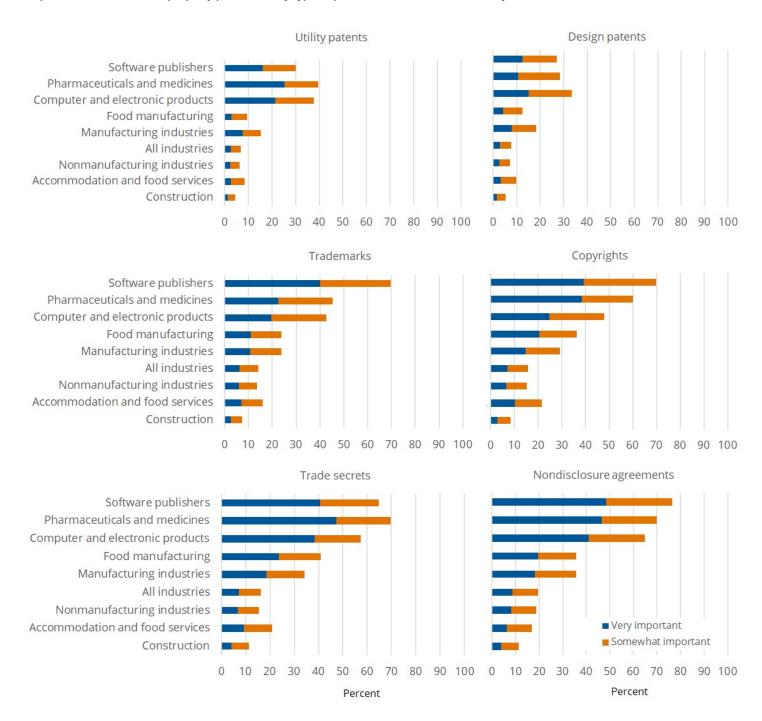
Industry

Of the 4.6 million businesses estimated by ABS,³ 4.8% are classified in manufacturing industries and 95.2% are classified in nonmanufacturing industries. A higher share of businesses in manufacturing industries than in nonmanufacturing industries consider each form of IP protection important (very or somewhat) (figure 1).⁴ The relative difference between manufacturing and nonmanufacturing businesses in the perceived importance of IP protection is greatest for design patents and smallest for trademarks. That is, 18.2% of manufacturing businesses view design patents as important, compared with 7.2% of nonmanufacturing businesses. Design patents, also known as patents for appearance, may be granted to anyone who invents a new, original, and ornamental design for a good. Trademarks were considered important by 23.7% of manufacturing businesses and 13.7% of nonmanufacturing businesses.

Within the broad categories of manufacturing and nonmanufacturing, there is significant variation between industries in how they rate the importance of different types of IP protection. For example, the share of pharmaceuticals and medicines manufacturers that report utility patents as very or somewhat important is four times the share of food manufacturing businesses that report them as very or somewhat important. Utility patents, commonly known as patents for invention, are IP rights granted to inventors in a legal jurisdiction that gives them the sole right to use the invention for a limited time in exchange for public disclosure of the invention when the patent is granted. Patents—both design and utility—were also viewed as important by relatively more computer and electronic products businesses than businesses in other manufacturing industries.

As noted earlier, most businesses in the United States are classified in nonmanufacturing industries, which explains why the estimates for nonmanufacturing and "All industries" are so similar (figure 1). An outlier among nonmanufacturing industries is software publishing when it comes to perceptions of IP protection. That industry is particularly reliant on copyrights—a form of IP protection that covers original software programs as well as other works of authorship including literary works, art, motion pictures, and sound recordings (15 U.S.C § 102). Almost 70% of software publishers viewed copyrights as important. Across all industries, the software publisher industry also had among the highest share of businesses reporting trademarks, trade secrets, and nondisclosure agreements as very or somewhat important. Compared with the software publisher industry, a smaller percentage of businesses in most other nonmanufacturing industries viewed IP protection as being important. For the construction industries, none of the types of IP protection covered by ABS were considered very important by more than 5% of businesses. For accommodation and food services businesses, copyrights and trade secrets were more frequently reported as important than were other types of IP protection.

Figure 1
Importance of intellectual property protection, by type of protection and selected industry: 2017



NAICS = 2017 North American Industry Classification System.

Note(s):

Industry classification is based on dominant establishment payroll. Statistics are representative of companies located in the United States with at least one employee. There were estimated to be 4,603,606 such companies in 2017.

Source(s):

National Center for Science and Engineering Statistics and Census Bureau, Annual Business Survey, 2017.

Size of Company

For each of the types of IP protection covered by ABS, the share of companies reporting them as important is much larger for companies with 5,000 or more U.S. employees compared with companies with fewer than 500 U.S. employees (figure 2). The relative difference between the largest businesses (those with 25,000 or more employees) and the smallest (those with 1–4 employees) was greatest for utility patents, where the percentage of the largest businesses indicating this type of protection was important (38.8%) was more than six times the percentage of the smallest businesses (6.0%). A higher percentage of very small businesses indicated trade secrets (13.5%) and nondisclosure agreements (16.1%) were important forms of IP protection for them.⁵ The percentage of the largest companies that viewed these types of IP protection to be important was over four times the corresponding percentages for the smallest companies.

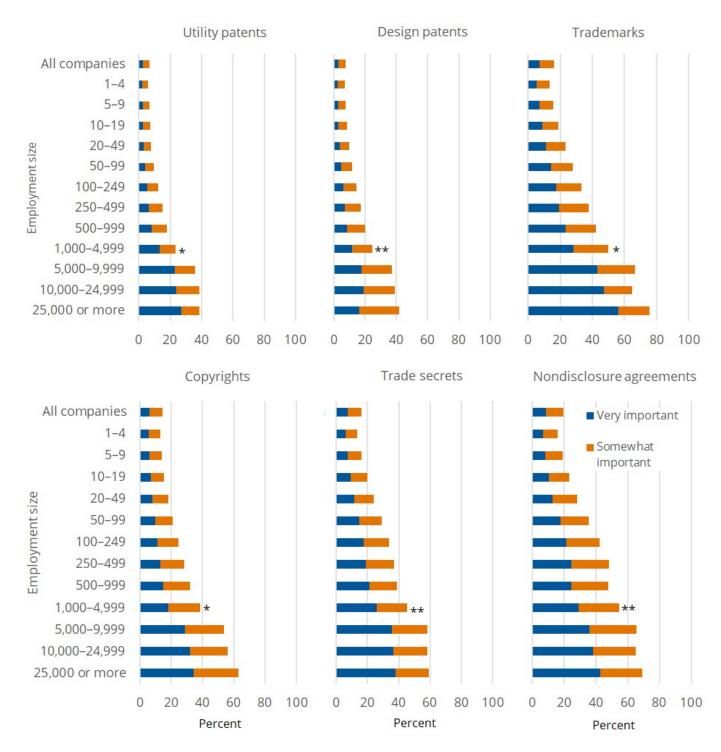
Innovation Activity

In addition to the questions about IP protection, the 2017 ABS also asked businesses about innovation activity. Innovation is defined as the implementation of one or more new or significantly improved products or processes, a new marketing method, or a new organizational method.⁶ During 2015–17, more than one out of four respondents (27%) indicated that they were product or process innovators.⁷ Figure 3 presents the importance of the six types of IP in the ABS for product or process innovating companies, for non-product or non-process innovating companies, and for all companies. For each type of IP, the share of innovating companies indicating IP protection as very or somewhat important is almost twice that of the overall population of businesses surveyed by ABS. Nondisclosure agreements and trade secrets are considered important by more innovating companies than are the other types of IP protection.

Comparison to Data from 2008

The earliest estimates of the importance of IP protection to U.S. businesses that are directly comparable to those from ABS are from the 2008 Business R&D and Innovation Survey (BRDIS).8 The 2008 BRDIS asked businesses with five or more employees about the same types of IP protection included in ABS except for nondisclosure agreements. As in 2017, the share of businesses in 2008 that reported trademarks, trade secrets, and copyrights were important was larger than the share of those that reported design or utility patents as important (figure 4). Besides this similar pattern, a larger share of businesses found each type of IP protection to be important in 2017, compared with the share reported in 2008 (20% of businesses with five or more employees indicated trade secrets were important in 2017 vs. 14% in 2008).

Figure 2
Importance of intellectual property protection, by type of protection and company size: 2017



^{*} Relative standard error > 50% for very important.

Note(s):

Industry classification is based on dominant establishment payroll. Statistics are representative of companies located in the United States with at least one employee. There were estimated to be 4,603,606 such companies in 2017.

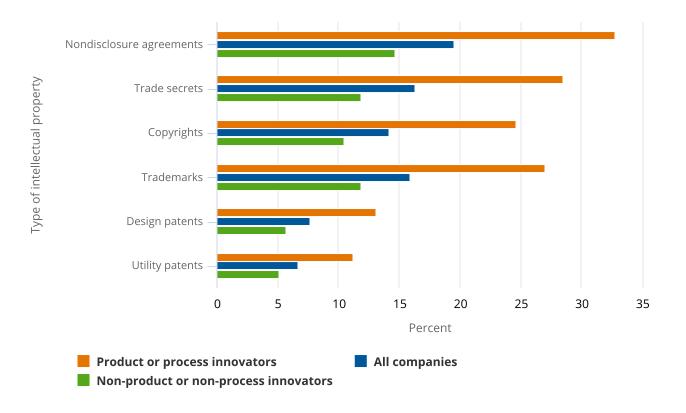
^{**} Relative standard error > 50% for very important and somewhat important.

Source(s):

National Center for Science and Engineering Statistics and Census Bureau, Annual Business Survey 2017.

Figure 3

Companies indicating intellectual property protection is very or somewhat important, according to whether the companies are product or process innovators: 2017



Note(s):

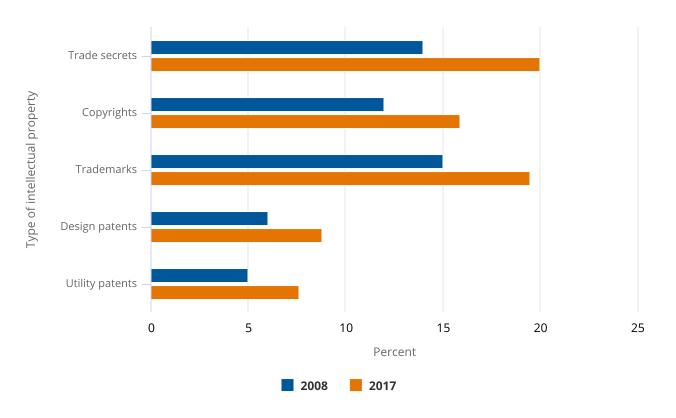
Statistics are representative of companies located in the United States with at least one employee. There were estimated to be 4,603,606 such companies in 2017. An estimated 1,218,460 companies were product or process innovators in 2017.

Source(s):

National Center for Science and Engineering Statistics and U.S. Census Bureau, Annual Business Survey, 2017.

Figure 4

Companies indicating intellectual property protection is very or somewhat important, by type of protection: 2008 and 2017



Note(s):

Statistics are representative of companies located in the United States with five or more employees.

Source(s)

National Center for Science and Engineering Statistics and Census Bureau, Business R&D and Innovation Survey, 2008, and Annual Business Survey, 2017.

Data Sources and Limitations

The ABS is conducted by the Census Bureau in partnership with the National Center for Science and Engineering Statistics (NCSES) within the National Science Foundation (NSF). The survey collected detailed statistics from businesses located in the United States on research and development expenditures, R&D employees, IP, company and primary owner characteristics, and innovation activities. The statistics from the survey are based on a sample, and as such, they are subject to both sampling and nonsampling errors. (See "Technical Notes" in the data tables report *Annual Business Survey: Tables for Data Year 2017* that is available at https://www.nsf.gov/statistics/srvyabs/.)

For the 2017 ABS, a total of 849,970 companies with employees were sampled to represent the population of 5.3 million employer companies, and the unit response rate was 69.0%.

The 2008 BRDIS was also conducted by the Census Bureau in partnership with NCSES. It sampled 39,553 companies to represent the population of 1.9 million for-profit companies with five or more domestic employees, and its unit response rate was 77.4%.

The full set of data tables on R&D, company demographics, innovation, technology, and patent and IP protection from this survey is available in *Annual Business Survey: Tables for Data Year 2017* at https://www.nsf.gov/statistics/srvyabs/. Individual data tables and tables with relative standard errors and imputation rates from the 2017 survey are available in advance of the full report.

Notes

- 1 The ABS did not ask whether businesses considered one form of IP protection to be more important than another. We can say that more companies viewed one form of IP protection as important than viewed another as important, but it is not known whether one form of IP protection is more important than another among companies that considered both important.
- 2 As defined in the Lanham Act (the U.S. Trademark Act), a *trademark* refers to goods and a *service mark* assigns similar rights to the source of a service rather than goods, although the term trademark is used here to refer to both trademarks and service marks (15 U.S.C. § 1127).
- 3 After nonprofits and out-of-business companies were removed, 4.6 million is the estimated number of companies.
- 4 Some businesses have establishments that operate in different industries. ABS classifies companies into one industry based on payroll.
- 5 Trade secrets and nondisclosure agreements are the least costly forms of IP protection for a business to use because they do not require the time, money, and other resources to implement that the other types of IP protection do. Patents in particular can involve thousands of dollars in attorney and filing fees.
- 6 Organisation for Economic Co-operation and Development (OECD) and Statistical Office of the European Communities (Eurostat). 2005. Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data. 3rd ed. Paris.
- 7 National Center for Science and Engineering Statistics (NCSES). 2020. Annual Business Survey: Tables for Data Year 2017. Table 35. Alexandria, VA: National Science Foundation. Available at https://ncses.nsf.gov/pubs/nsf21303.
- 8 Jankowski J; National Center for Science and Engineering Statistics (NCSES). 2012. *Business Use of Intellectual Property Protection Documented in NSF Survey*. NSF 12-307. Alexandria, VA: National Science Foundation. Available at https://www.nsf.gov/statistics/infbrief/nsf12307/.

Suggested Citation

Shackelford B, Kindlon A; National Center for Science and Engineering Statistics (NCSES). 2021. *Nondisclosure Agreements, Trade Secrets, and Trademarks Considered Very Important to More U.S. Businesses than Were Patents or Copyrights in 2017.* NSF 22-305. Alexandria, VA: National Science Foundation. Available at https://ncses.nsf.gov/pubs/nsf22305.

Contact Us

Report Authors

Audrey Kindlon Survey Manager Research and Development Statistics Program, NCSES

Tel: (703) 292-2332 E-mail: akindlon@nsf.gov

Brandon Shackelford

Twin Ravens Consulting, under contract to NCSES

NCSES

National Center for Science and Engineering Statistics Directorate for Social, Behavioral and Economic Sciences National Science Foundation 2415 Eisenhower Avenue, Suite W14200 Alexandria, VA 22314 Tel: (703) 292-8780 FIRS: (800) 877-8339 TDD: (800) 281-8749

E-mail: ncsesweb@nsf.gov